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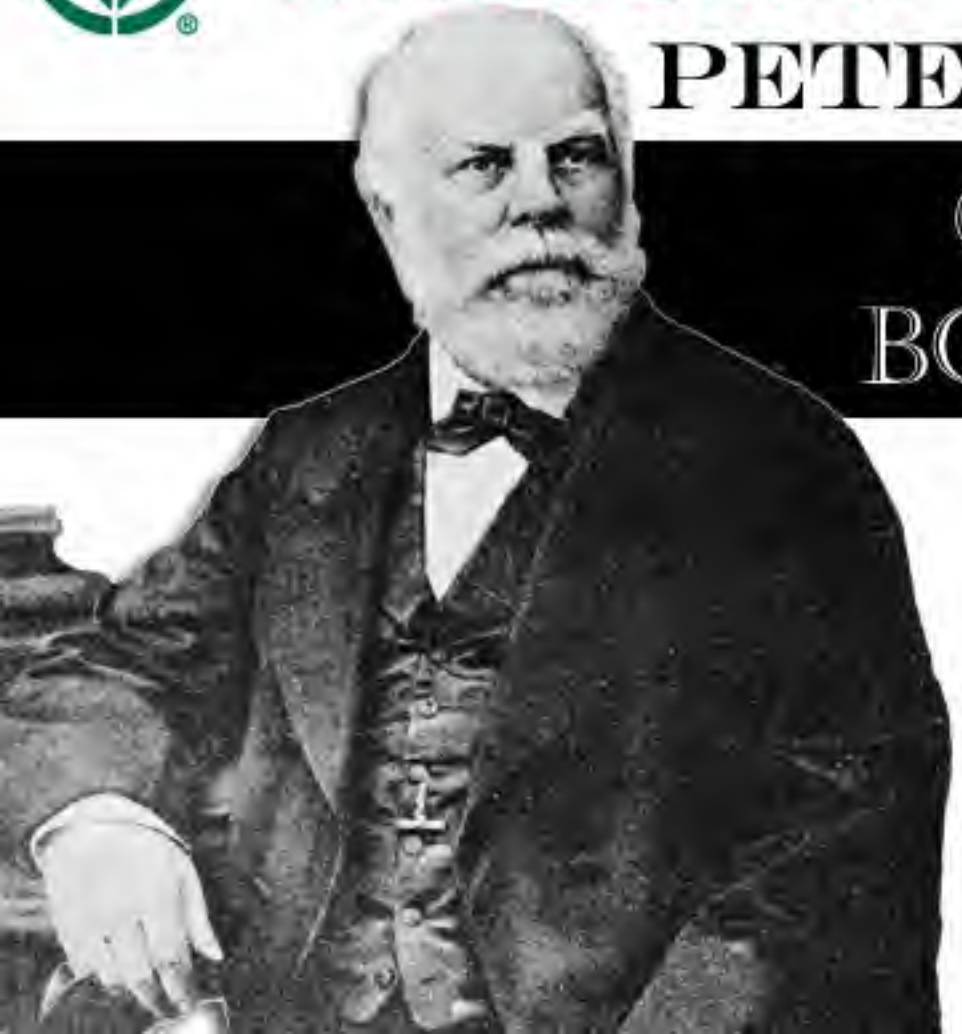

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Palmer

Contributions

YEARLY REPORT OF ATMOSPHERIC ELECTRICITY, TEMPERATURE, AND HUMIDITY, FROM OBSERVATIONS MADE AT ST. LOUIS, MO.

By A. WISLIZENUS, M.D.

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I.—*Monthly Mean of Positive Atmospheric Electricity in* 1861–1867, *based on daily observations at* 6, 9, 12, 3, 6, *and* 9 *o'clock, from morning till night.*

ATMOSPHERIC ELECTRICITY.

Year.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Mean of Year.
1861	16.5	12.1	9.8	8.8	7.8	4.0	3.7	3.4	3.0	7.1	10.0	14.3	8.4
1862	12.1	16.0	9.4	10.6	7.5	3.0	2.2	2 3	3.0	7.7	12.6	13.9	8.4
1863	16.9	15.9	13.6	8.8	4.7	2.0	2.8	4.4	4.8	12.5	12.1	11.5	9.2
1864	15.8	11.3	11.0	8.5	5.1	4.0	2.3	0.9	1.8	5.4	6.6	9.0	6.8
1865	12.2	9.5	5.9	3.3	2.4	3.4	2.6	5.9	1.2	5.3	10.1	6.4	5.7
1866	5.9	8.1	5.7	2.1	3.3	2.1	2.4	5.1	3.2	7.0	10.2	7.0	5.2
1867	9.2	8.2	6.5	3.3	2.9	2.8	2.7	5.2	3.5	3.0	4.2	4.2	4.6
Mean	12.7	11.6	9.0	6.5	4 8	3.0	2.7	3.9	2.9	6.9	9 4	9.5	6.9

[This folder includes sheets 107-109]

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3.—*Yearly Mean of Positive Electricity, of Temperature and of Relative Humidity of the Atmosphere at the hours of* 6, 9, 12, 3, 6 *and* 9, *from morning till night, based upon daily observations at those hours in* 1861—1867.

ELECTRICITY.

Year.	6 A. M.	9 A. M.	12 M.	3 P. M.	6 P. M.	9 P. M.
1861	8.5	9 9	9 0	7.7	8.5	6.8
1862	8.9	10.0	9.1	7·3	8.1	6.8
1863	10.5	10.6	10.0	7·5	9.1	7·4
1864	7·9	8 8	7·4	5·4	5·9	5·5
1865	6.4	7.1	6 0	5·3	5 4	3·8
1866	5·5	6.2	5.2	4·5	5·2	4·4
1867	5·2	5.6	4 9	4·2	4·3	3·8
Mean:	7 6	8.3	7·4	6 0	6.6	5·5

TEMPERATURE.

1861	48.9	54.9	61.6	63.6	59.3	54·3
1862	48.9	55.0	60.9	62.3	[illegible]	53.6
1863	[illegible]	53.6	59.7	61.0	57.2	52.2

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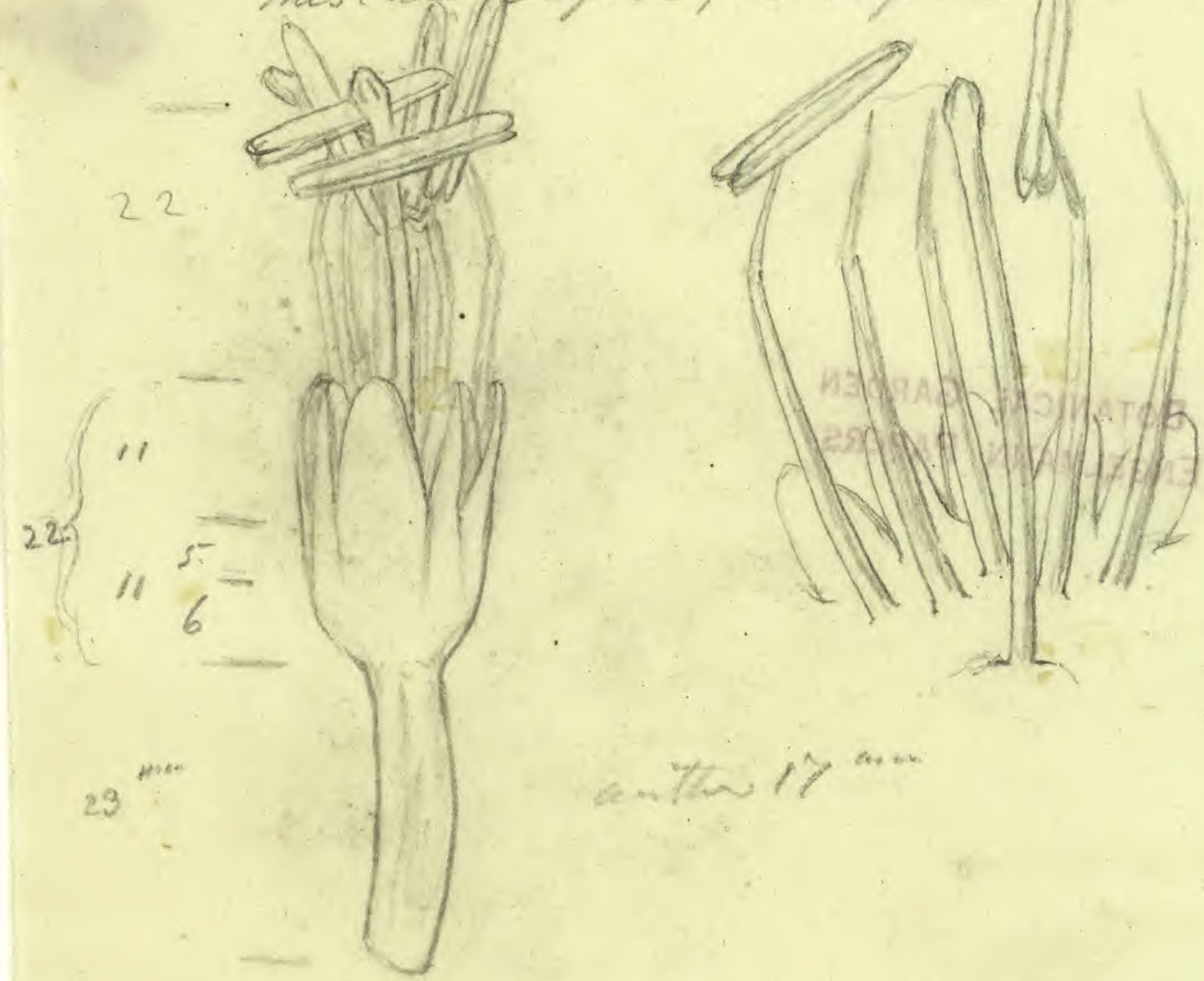
Agave Palmeri ?

"mescal Agave", Arizona Dr C Palmer 1870

May 21 1870



flower pentamerous

flower 15 mm long

ovary 23

perig 22 campanulate

carinae united to ~~above~~ mid-N — or above, obtuse

filaments inserted about middle of tube

inner ones lower than outer ones — erect

about as long as perigon

anthers 17 mm long, oblong

above, extrorse below;

style thrice as long as perigon or longer, conic capitate stigma

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HENRY SHAW SCHOOL OF BOTANY
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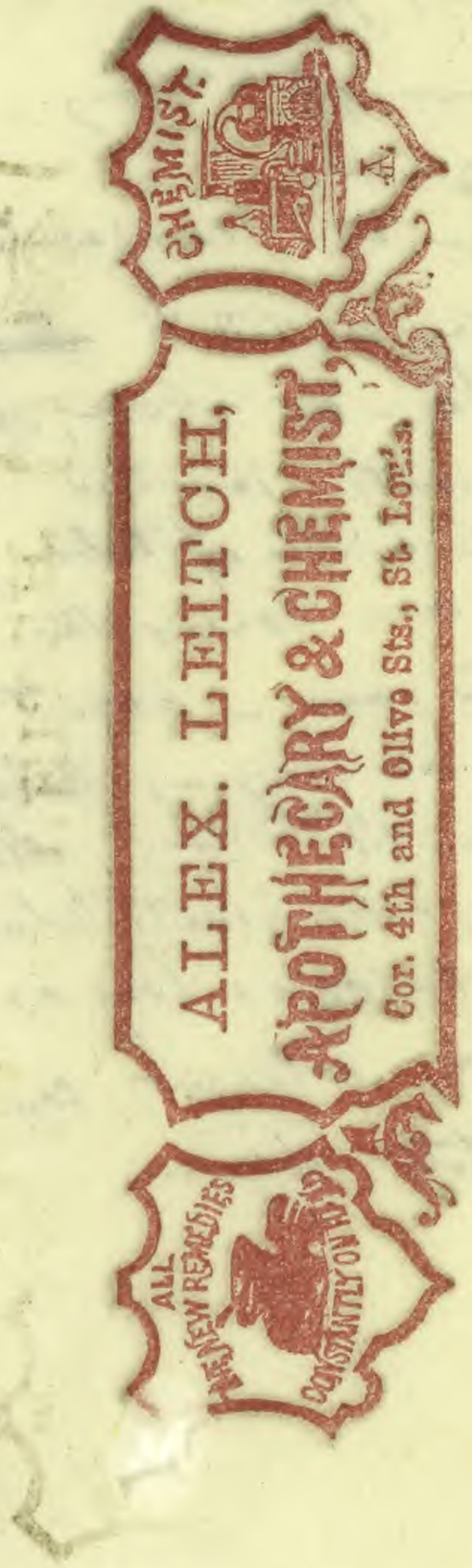

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March 1 1871

Agave

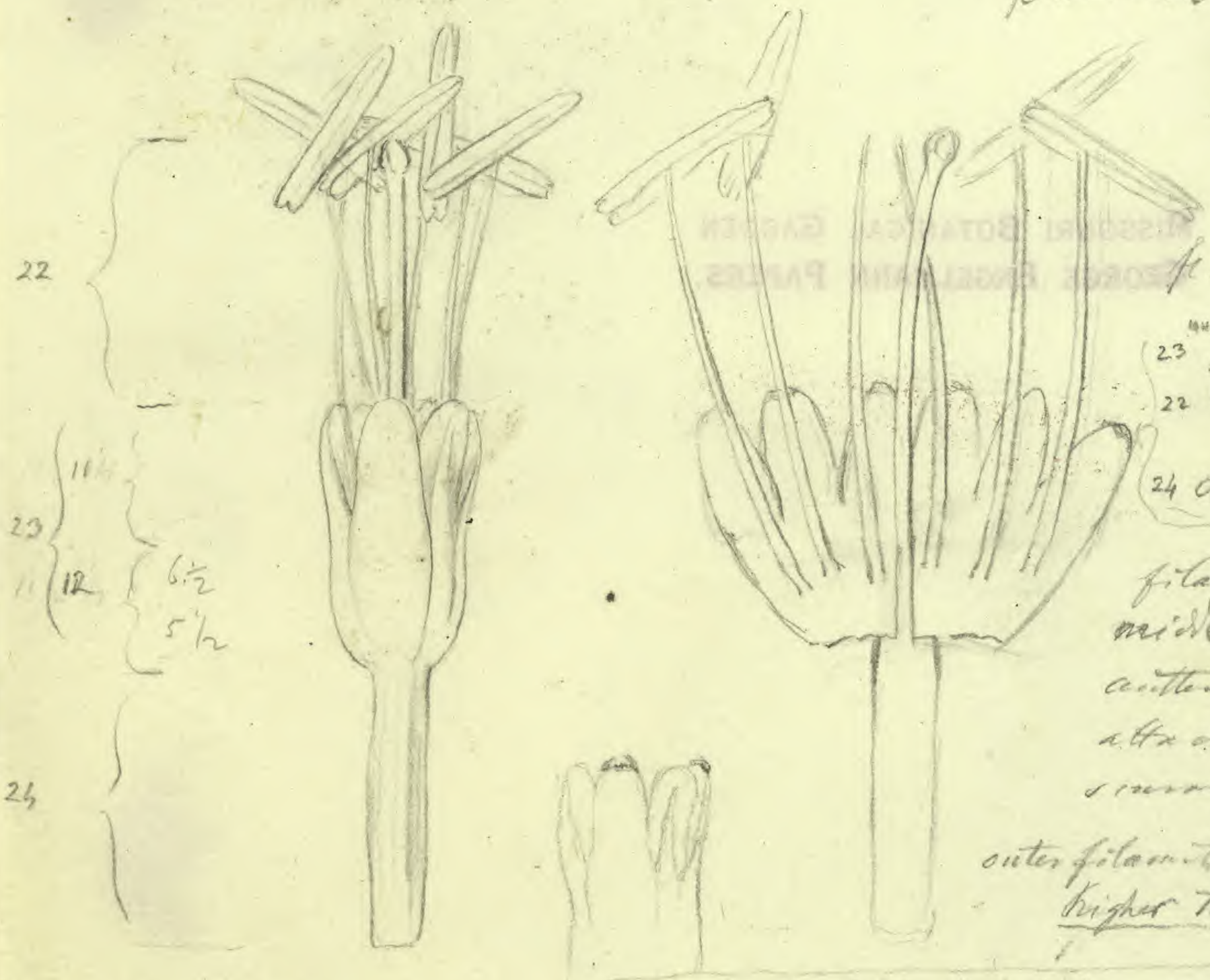
Mescal Agave

Arizona

Dr Palmer 1870

yl whitish

pseudo-bulb



Lobes nearly as long as campanulate Tube ft. 48 mm without stamens

23 mm perigon divided nearly to middle

22 exserted part of style and stamens

24 Ovary about equally long

filaments inserted below middle of tube

anthers 17 mm long attached ± below the narrowly emarginate tube.

outer filaments inserted about 1 mm higher than inner ones

Sept 7 outer lobes longer! callose!

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ALEXIS, LEJEUNE
APOTHECARY AND CHEMIST.
Marble Building, cor. 4th and Olive Sts.,
ST. LOUIS, MO.

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Sept 7 1871

Palmeri Regel Agave

Palmer 1870

Dried flowers. recexamined

						Sachse
15 mm	diathem				15 mm	17
35	filaments	exserted part	20	}	34–35	38–39
		within perigon	14–15	}		
		lobes	8–10	}		11
20	perigon	free	5–6	}	18–21	22
		tube	10–11	}		12
		stamen adnate	4–5	}		
23	ovary				22–24	23

Agave Palmeri Eng ?

in flores hunc

perigonio ovario (tertia-parte infera) cylindraceo, lobis ovatis (pollicaribus) ad medium 6-fidis, lobis ovatis obtusis exsertis, filamentis medio tubo adnatis exsertis, antheris (8–9 lin. longis) perigonii lobis (quatuor) brevioribus

M. W. ALEXANDER,

south-east corner Fourth and Market Streets,

ST. LOUIS.

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Leitch & Corlies

DRUGGISTS

South West Corner Fifth and Market Streets.

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Agave Palmeri Eng.

South Arizona (Thurber &c)

May 15 1872

Dr Palmer 1869

×150

epiderm
cells small,
tuberculate, roundish
often pitted & minute

seeds of ... Gourd

are exactly the same

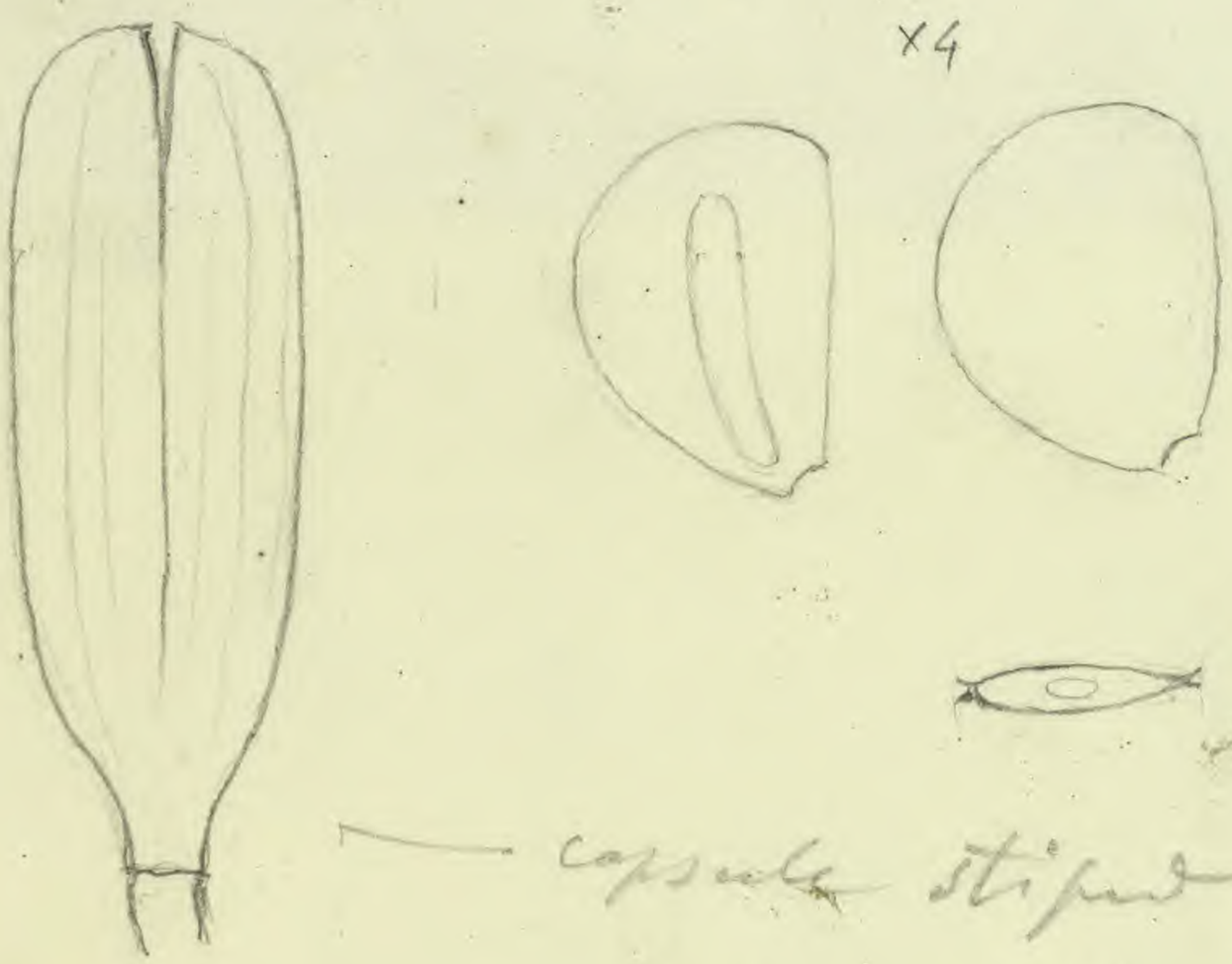
Agave Palmeri

Arizona Dr Palmer 1869

June 25 1871.

(Cont. from card)

×4



5.5 mm long

capsule stipe

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Leitch & Corli

DRUGGISTS

SouthWest Corner Fifth and Mar

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Leitch & Corlies

DRUGGISTS

South-west Corner Fifth and Market Streets

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Rothrock's spec. — Agave Palmeri — Nov 20'75

Ovary (25-30 m/m) equal to Perigon (20-30 m/m)
lobes of perigon ovate (10-15 m/m) about as long as
the wide funnel shaped campanulate tube (11-15
filaments inserted about the middle of the tube;
(adnate 5-7-10 m/m; free part of filam. 15-20 m/m)
or a little above middle of tube 5-6 m/m
fully developed style longer than filaments
to 60 m/m
capsule cylindric, seeds small 5½-6 m/m
× 4+5

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TODDARD PHARMAC
W. Corner Easton and Garrison Ave's.
POOLE & CO.

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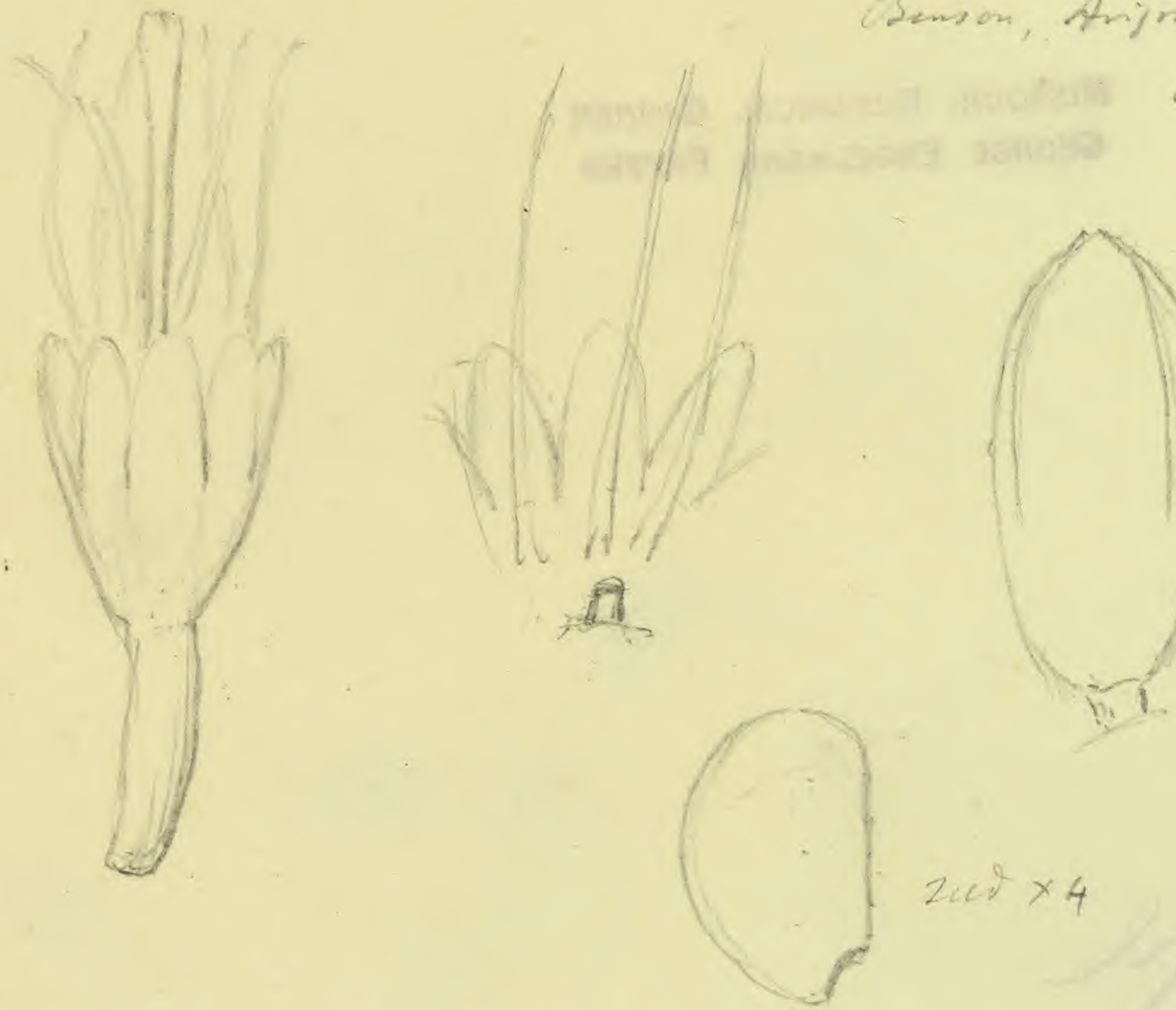
Agave Palmeri

Feb 4 1880

Benson, Arizona, Dr Parry Jan 1881
old dead flowers soaked



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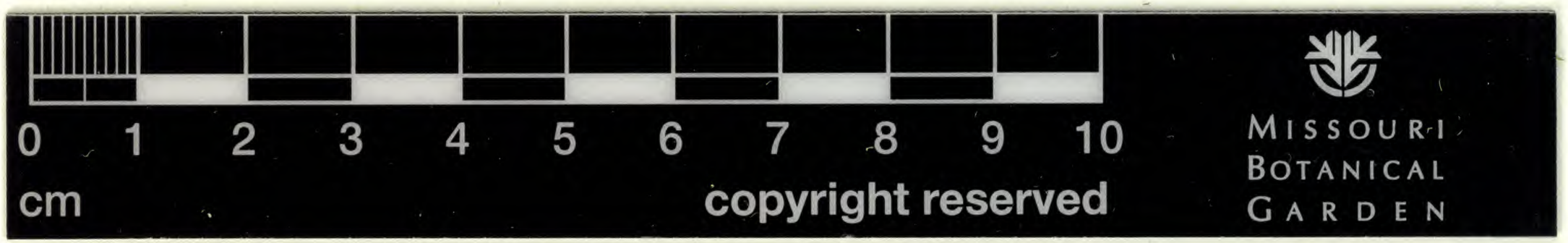
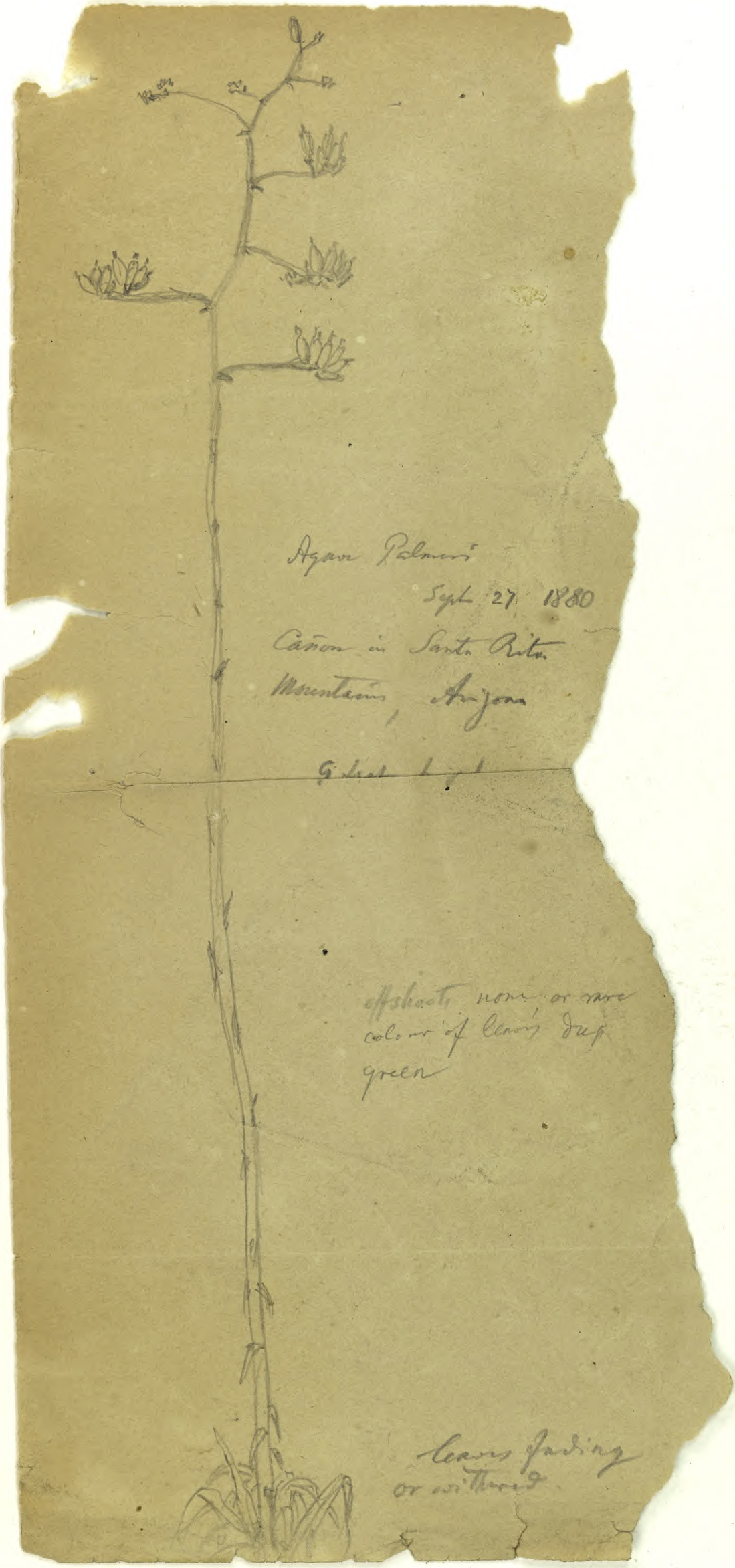
No. _____ Date, _____ 187

Geo. Engelmann, M. D.,
No. 3003 Locust Stree





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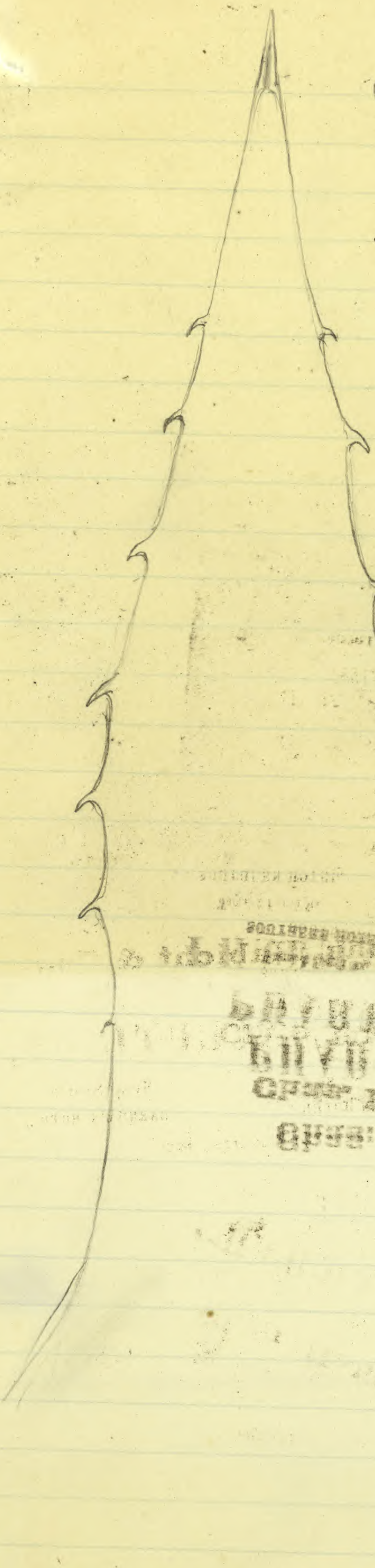
Agave Palmeri

Dr E. Palmer



sect. of spine
x2

Terminal spine scarcely more than ½ inch long rounded below channeled abv upper side
marginal spines all stout and strongly unc[illegible] stouter three in large smaller on lower half —
No decurrent margin noted

Leaf examined 10 inches long
2 inches wide

scarcely contracted above the base

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496 Agave
Rattrock
Ft. Wingate

Febr 19 1875

Lobes of Stigma
Correspond with Carpels

x 2

root of ovary x 2

anthers
17 mm Long
green

fully developed
style longer
than filaments

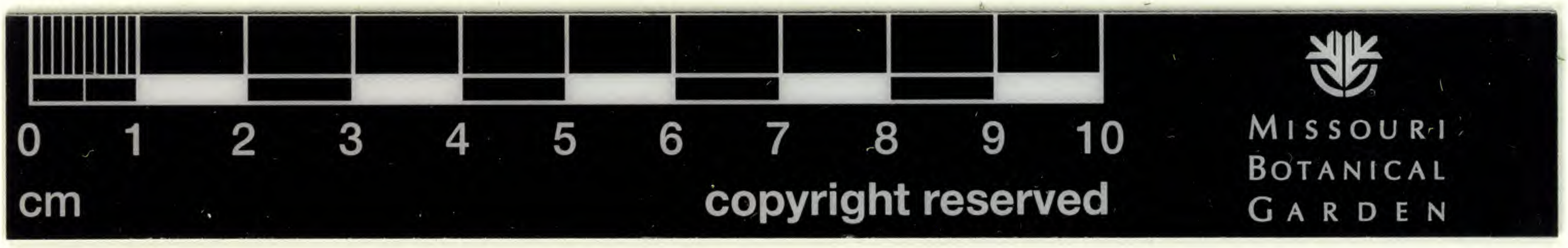
two different flowers

9	10	lobes	
6	6	free	upper part of tube
5	7	adnate	
25	26	ovary	

Lobes 10 mm
Tube 18 mm
Ovary 26
Stamen adnate 7 (a little above middle of tube, inner ones slightly below outer ones)
free part of 6 mm
stamens when red, exserted as long as perigon

root — peduncle

lobes of stigma correspond with exterior perigonial lobes



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A. Kirkbride 23 E8 ANP 3500 Olive St.
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ovary longer than perigon

tube longer than erect sepals

stamens adnate to about middle

exsert about the length of perigon

filament red below, green upward anthers [illegible]

green

fully developed style longer than filament.

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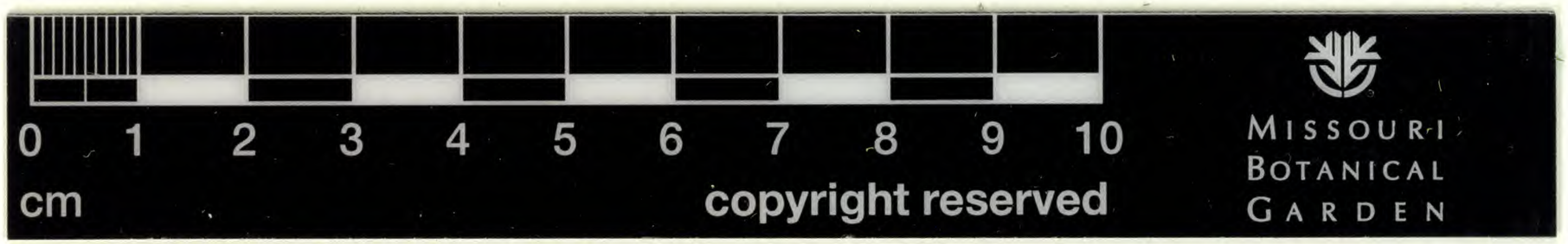
Santa Rita Mts Ariz Sept 26-27 1880

Agave Palmeri leaves 18-20" long, 1¼-1½" wide, green
not narrowed above base — other plants have shorter
and wider leaves; scape 9 feet high; panicle
30 inches long of 6-8 branches, open, loose, axis flexuous.
Branches 9" long, fruit clustered at end of branches.
Larger specimen had ~~panicle~~ scape 15' high 2¾" thick of whole panicle
7 feet, 13 branches, 1 foot long. axis flexuous.

Pringles plant 1881 10-12 feet high, flowers purplish white from Santa Rita Mts
plant from the Sta Catalina Mts had yellow flowers and very
Coyote



Distribution of Neguindo Californica
and all kind of interest.

~~Interest Wisdom most specimen~~

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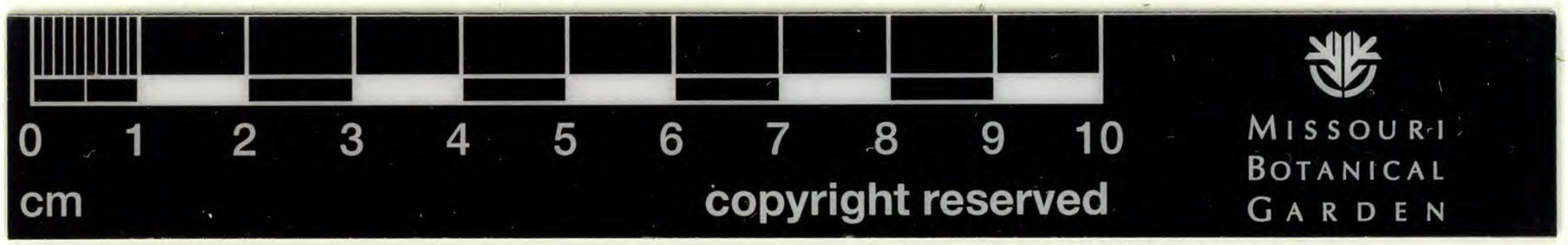
All wood specimens to be shipped
unpaid to The Sierra Lumber Company.
4th & Channel Sts. San Francisco.
Company to be notified of shipment



Jan 1882

Hyacinthus Palmeri Coy.

Rottnest exm. Febr 1875 fl. whitish

Lobes 9–10 mm
tube above filam. 6
tube below filam 5–7 } 11–13
anthers 17 — 20 mm Long
} 20–23

Palmer 1870, exm March 1871 whitish.

Lobes 11 mm
tube above filam 6½
" below. 5½ } 12
anthers 17 mm
} 23

Pringle 1881. exm Jan 1882. White

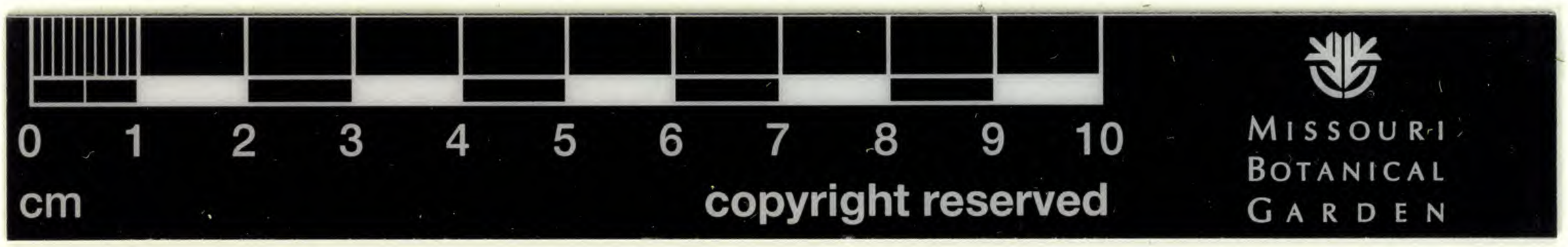
Lobes 10 mm
tube above filam 6 ?
" below - 8 } 14
anthers 18 mm Long
} 24

Bulb: lobes a little shorter than perigonial tube; stamens inserted near the middle of tube, a little below or rarely also a little above the middle. —— perigon about 1 inch long or a little less

---

Yellow flowered variety Pringle, Santa Catalina Island

lobes . . . . . 13 mm
tube above filam. 8 ? 16
" below " 8
anthers 21 mm. Long
} 29



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Successors to C. W. GAUSS & SONS,

Boots & Shoes

419 WASHINGTON AVE.

St Louis, Jany. 13 1882

Dr. Geo. Engelmann
City!

Dear Sir!

Enclosed we hand you Check for $260.— in payment of your bills against Mrs. C. St. Gauss. Please send receipt to our address & oblige

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A Palmeri

Palmer says the leaf and
fruit specimen of Agave
collected in 1869 are from near
Wickenburg Arizona, about
80 miles north of the Gila River

Flowers are from a previous
collection, made in Southern Arizona
from a plant which Palmer considered
identical with the Wickenburg plant

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all this needs revision

GEORGE ENGELMANN, M. D.,
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and
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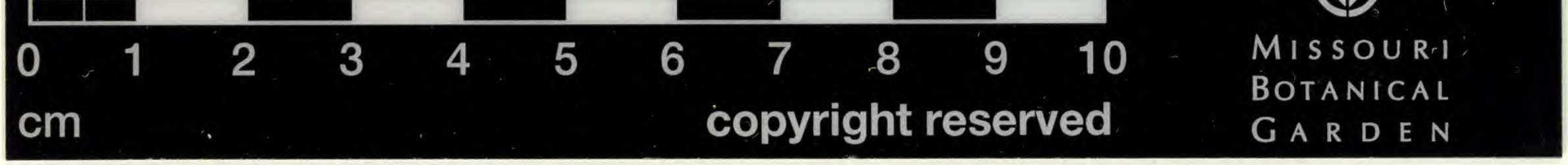

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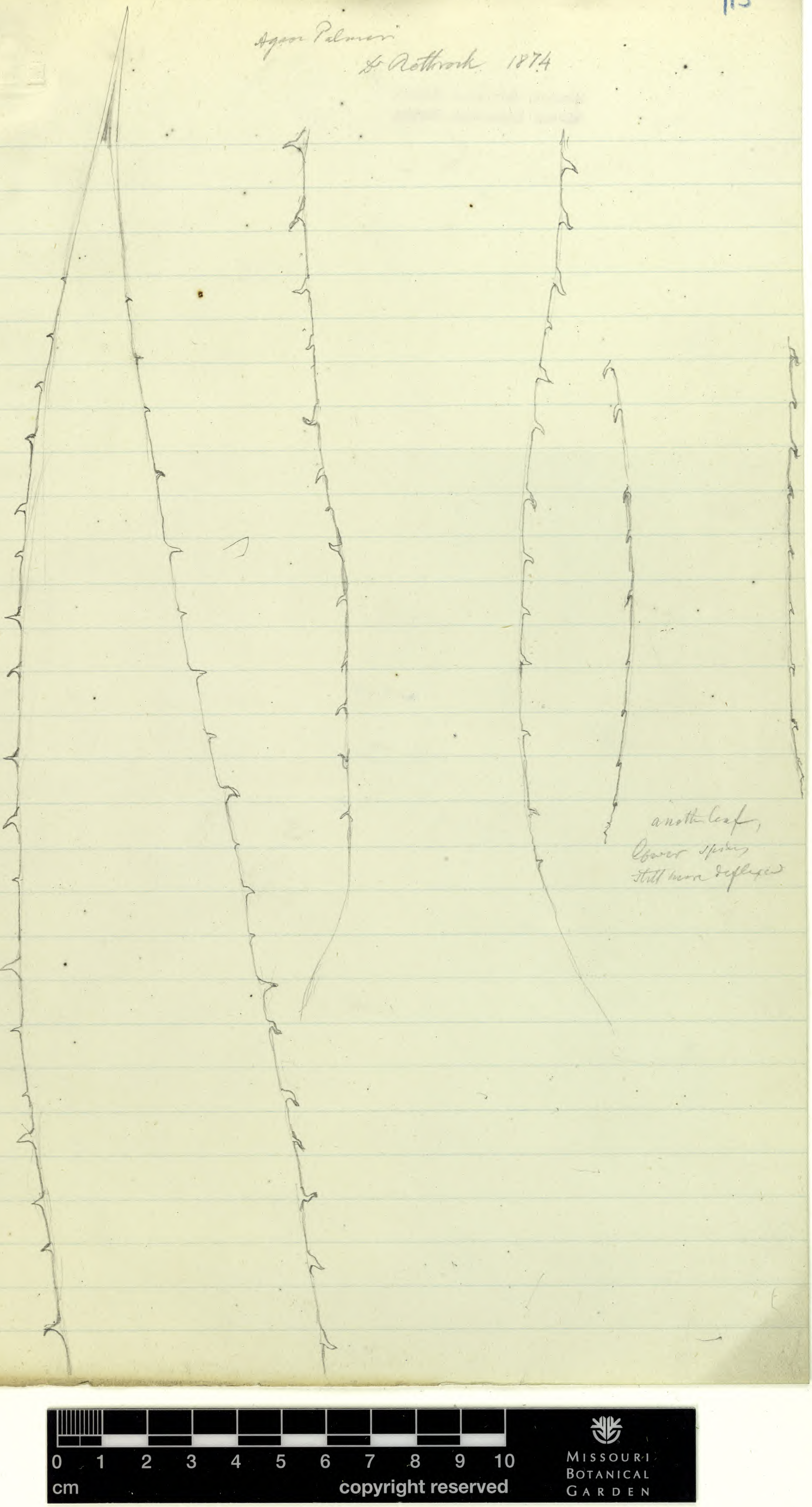
Agave Palmeri
S. Rothrock 1874



another leaf,
Lower spines
still more depressed

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Leitch & Corlies

SUR

Une forme anormale de l'AURELIA AURITA Lam.

OBSERVÉE DANS LE PORT DE CETTE,

Par **M. DOUMET-ADANSON.**

Linné comprenait dans le genre unique des *Méduses* tous les animaux mous et gélatineux appelés depuis par Lamarck *Radiaires mollasses*, et par Cuvier *Zoophytes acalèphes*.

Depuis Linné, Forskal, Péron et Lesueur, Lamarck, Cuvier et autres éminents zoologistes, une foule de travaux, principalement anatomiques, ont jeté une vive lumière sur l'organisation de ces singuliers animaux qui, en raison de l'étrangeté de leurs formes, conservent le privilége de toujours éveiller l'attention. Escholtz, de Blainville, F. Dujardin, Quoy et Gaymard, Milne Edwards, Ehremberg, Lesson, delle Chiaje, Rosenthal, de Siebold, pour

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veau. C'est ce que je ne craindrai pas de faire aujourd'hui à propos de ce que je crois être un individu anormal de l'*Aurelia aurita* Lam. (*Cyanea aurita* Cuv.), espèce d'une excessive abondance dans les eaux du port de Cette et de l'étang de Thau, dont le premier est le débouché direct dans la mer.

Bien que n'offrant rien que de parfaitement connu actuellement des zoologistes, pour faire ressortir l'originalité du fait que le hasard m'a fait observer, je crois utile de rappeler ici quelques-uns des traits caractéristiques de la famille des MéduSaires.

Les *Radiaires médusaires* de Lamarck, *Méduses* ou *Discophores* d'Escholtz, *Méduses* de Cuvier, sont des animaux réguliers et symétriques dans leurs formes et leurs organes. Lamarck, qui, de même que Péron et Lesueur, considérait comme des bouches les poches visibles autour du centre du disque inférieur, lesquelles

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lacée dans le disque inférieur, et lorsqu'il y en a plusieurs il paraît qu'il n'y en a ni moins de *quatre* ni plus de *dix*. Le plus ordinairement, les Médusaires à plusieurs bouches n'en ont que *quatre*.»

Plus loin (même édition, pag. 113), F. Dujardin ajoute : « Les *Méduses* sont les seuls *Acalèphes* ou *Radiaires mollasses* qui présentent, comme les *Échinodermes*, une disposition régulièrement rayonnée..... Mais, tandis que les parties et les divisions du corps des Échinodermes sont le plus souvent au nombre de *cinq*, celles des *Méduses* sont au nombre de *quatre* ou des multiples de *quatre* par 2, 4, 8 ou 16, et ce n'est que rarement ou accidentellement que d'autres nombres sont observés.»

Le nombre *quatre* est donc regardé comme fondamental dans les organes de cette section des *Acalèphes*.

Le genre *Aurelia*, qui fait le sujet de cette Note, n'échappe pas

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[1] Édition Deshayes, tom. III, pag. 107.

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ne citer que quelques-uns des savants modernes qui ont étudié les Médusaires, en rectifiant des erreurs longtemps accréditées, ont fait connaître d'une manière à peu près certaine les véritables fonctions des principaux organes de ces Zoophytes, et leur anatomie est, à l'heure qu'il est, passablement connue.

Cependant certains faits peuvent avoir échappé aux investigations des naturalistes, ce qui s'explique facilement quand on considère la presque impossibilité où nous sommes encore de conserver dans les collections ces corps gélatineux qui se fondent dès que la vie les a abandonnés : d'où l'obligation qui s'ensuit de les étudier sur place, rapidement, et en quelque sorte par hasard.

Dans ces conditions, il est utile, presque indispensable, dirai-je, que chacun fasse connaître, à l'aide des recueils scientifiques, les moindres observations qu'il lui est donné de faire, au risque même de rééditer du vieux en croyant signaler du nou-

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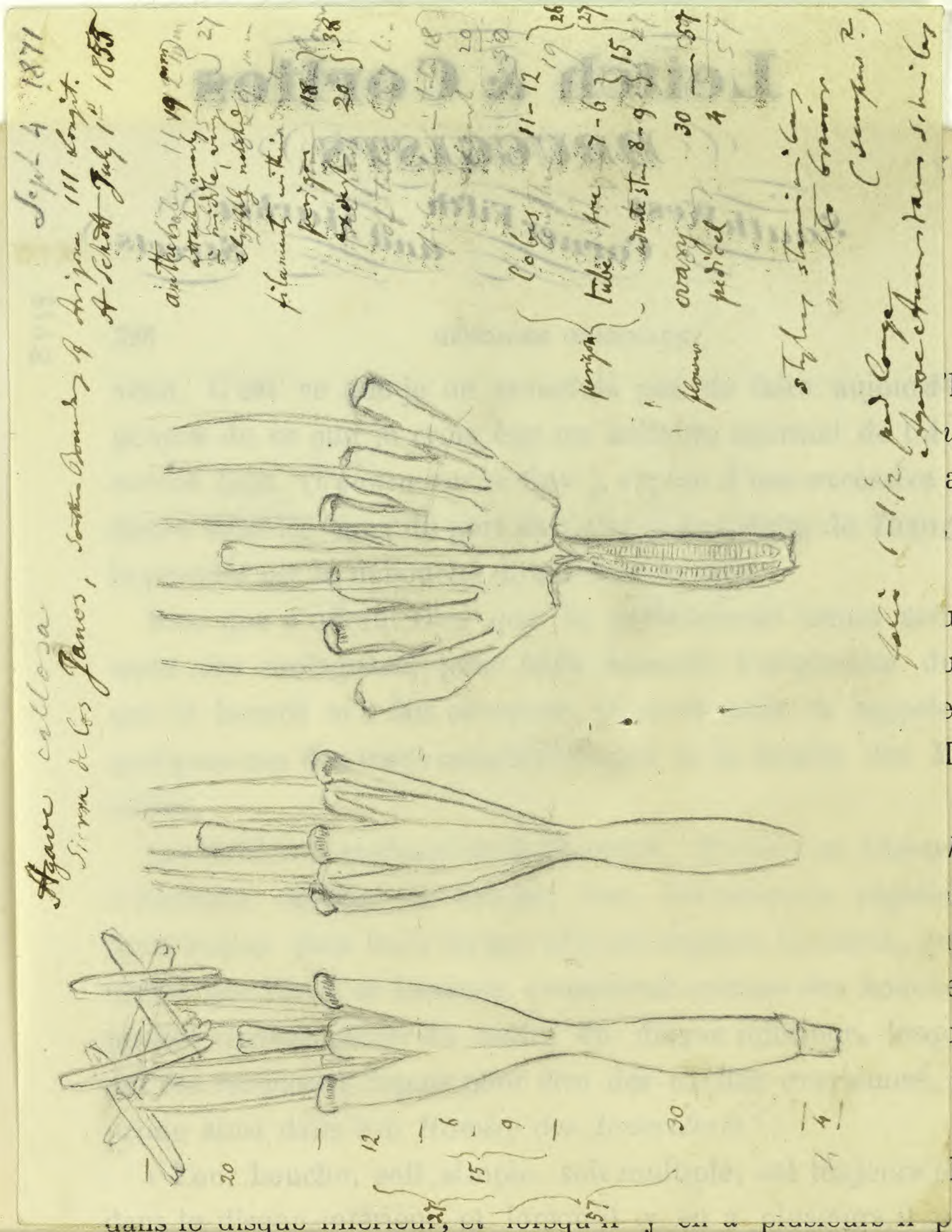

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cm 0 1 2 3 4 5 6 7 8 9 10

quelques-uns des traits caractéristiques de la famille des MéduSaires.

Les *Radiaires médusaires* de Lamarck, *Méduses* ou *Discophores* d'Escholtz, *Méduses* de Cuvier, sont des animaux réguliers et symétriques dans leurs formes et leurs organes. Lamarck, qui, de même que Péron et Lesueur, considérait comme des bouches les

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8143

Leitch & Cotlies
DRUGGISTS
South West Corner Fifth and Market Streets.

Missouri Botanical Garden
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